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Abstract Submitted
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Suggested title of session
in which paper should be placed
Multiphoton Processes in Atoms

Coherent Control of Resonant Population Transfer During Intense Laser Pulses K. J. SCHAFER UC SAN DIEGO and K. C. KULANDER LLNL - Recent experiments by several groups have examined the question of population transfer to resonantly excited states during intense short laser pulses. Of particular interest is the amount of population *trapped* in excited states at the end of a pulse. We present calculations using oppositely chirped short pulses which show that the amount of trapped population is very sensitive to the sign of the chirp if the pulse width is comparable to the excited state lifetime. Since oppositely chirped pulses have identical spectral and temporal intensity envelopes, the control achieved depends solely upon the coherence properties of the light pulse.

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Prefer Standard Session

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